



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
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Canada

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Fax 613 632-5246

D4961-041
Job Sheet 189916



Part No: D4961-041

Job Qty: 6 pcs

Part Name: Tube Assembly



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 1/31/19

Job Tracking No:

Due Date: 3/4/19

Created By: Dara Macdonald

Type: ~~SOLD~~ STOCK

Description:

Note: DWG REV C IPP REV:A 13.10.22 NEW ISSUE DD VERF:JFS IPP REV:B 15.02.18 AS PER DWG REV.B DD VERF:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		DAS Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Small Fab - 1	6 pcs	3/4/19		0.00	3.57	Small Fab - 1		58 9-89 FEB 05 2019
							Small Fab - 2		
							Small Fab - 3		
							Small Fab - 4		
							Small Fab - 5		
							Small Fab - 6		
							Small Fab - 7		
120	QC 5	6 pcs	3/4/19		0.00	0.00	QC 5 - 10		DAS 40 9-89 MAR 08 2019
							QC 5 - 12		
							QC 5 - 17		
							QC 5 - 18		
							QC 5 - 19		
							QC 5 - 22		
							QC 5 - 24		
							QC 5 - 3		
							QC 5 - 38		
							QC 5 - 42		
							QC 5 - 43		
							QC 5 - 49		
							QC 5 - 51		
							QC 5 - 58		
							QC 5 - 68		
							QC 5 - 9		
							QC 5 - 50		
							QC 5 - 30		
130	Packaging 3-1 - Stock - B4B	6 pcs	3/4/19		0.00	0.00	Packaging 3 - 1 - B4B		
							Packaging 3 - 2 - B4B		
							Packaging 3 - 3 - B4B		
							Packaging 3 - 4 - B4B		

				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	51129
				Packaging 3 - 28 - B4B	ST MAR 13 2019
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
140	QC 21 - SA	6 pcs	3/4/19	0.00 0.00	QC 21 - SA - 21
					QC 21 - SA - 70

DAS
MAR 13 2019 70
9-89

Part Op 110 - (Small Fab)
 Descriptions: 120 - (QC5- Inspect part completeness to step on W/O)
 130 - (Identify as per dwg & Stock Location: _____)
 140 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
AN818-L12J	Nut	12 Ea (2 ea)	110-Small Fab - 1	5143669
M304TR0.750W.049	304 Round Tube .750 X .049W	4.2000 ft (.7 ea)	110-Small Fab - 1	5126573
MS20819-12J	Sleeve	12 Ea (2 ea)	110-Small Fab - 1	51074312

5141239

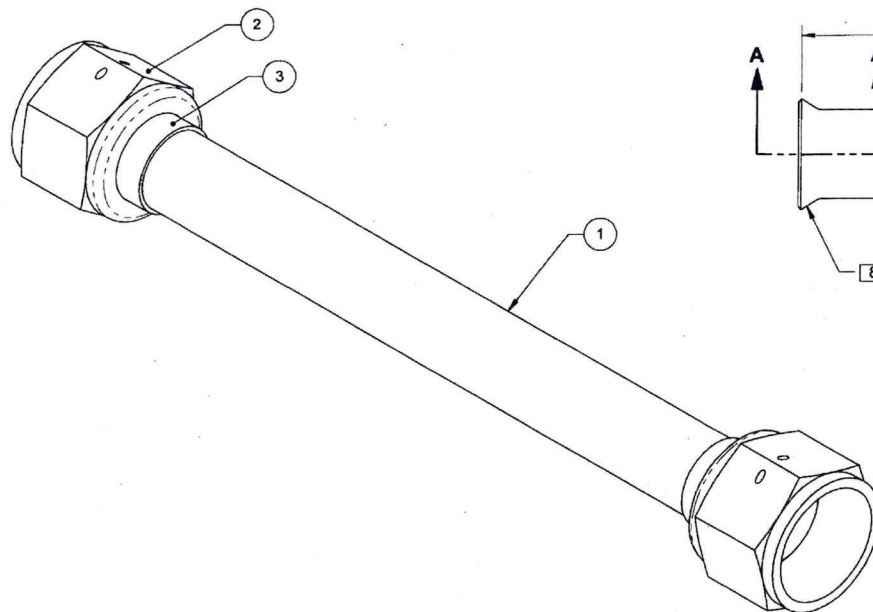
Job Allocations

Operation	Component Part	Required	Inventory	Allocated
110-Small Fab - 1	AN818-L12J	12	83	0
	M304TR0.750W.049	4	214	0
	MS20819-12J	12	52	0

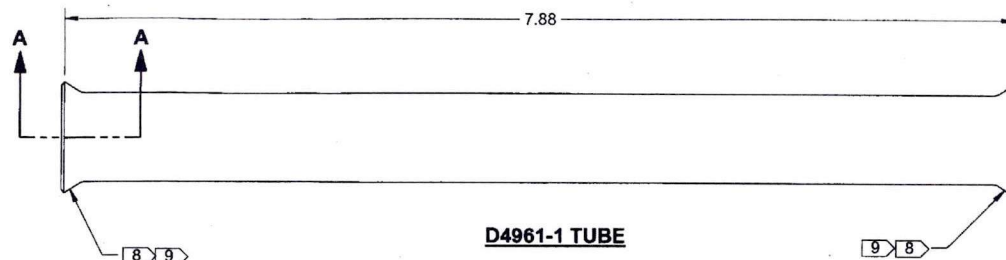
Part Specifications

Specifications could not be found.

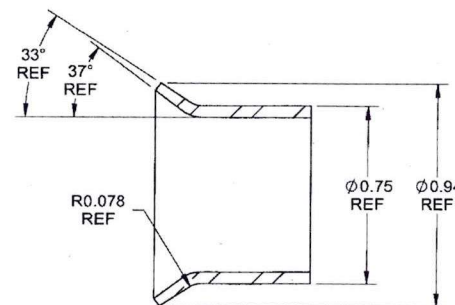
ITEM	QTY -041	P/N	DESCRIPTION
	X	D4961-041	TUBE ASSEMBLY
1	1	D4961-1	TUBE
2	2	AN818-L12J	NUT, TUBE COUPLING (DRILLED)
3	2	MS20819-12J	SLEEVE



D4961-041 TUBE ASSEMBLY



D4961-1 TUBE



SECTION A-A

NOTES:

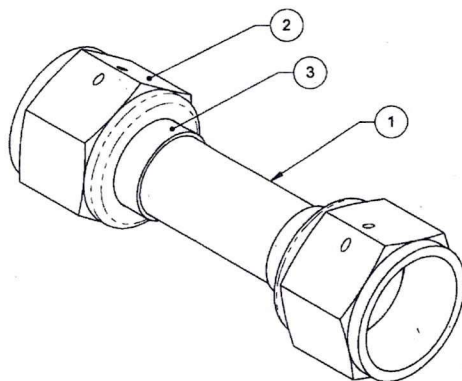
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SEAMLESS ROUND TUBING, $\phi 0.750 \times 0.049$ WALL PER ASTM A213 OR ASME SA213 OR ASTM A269 (REF DART SPEC M304TR)
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.59 lbs
- 8) FLARE TUBE PER MS33584
- 9) CLEAN INSIDE OF TUBE AFTER FLARING ENDS

RELEASED
2016-08-04
EW 16-622

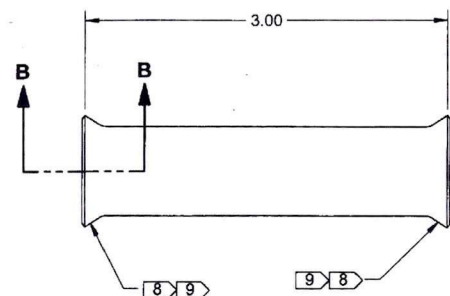
APPROVED

C	ADDED D4961-045 (SHEET 3)	CC	16.06.21
B	UPDATED BOM P/N AN818-L12J WAS AN818-12J. ADDED SHEET 2 (D4961-043)	AK	14.11.07
A	NEW ISSUE	VS	13.10.21
REV.	DESCRIPTION	BY	DATE
DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	CC		
CHECKED	VS	DRAWING NO.	REV. C
MFG. APPR.	DD	D4961	SHEET 1 OF 3
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	TUBE ASSEMBLY	NTS
DATE	16.06.21	COPYRIGHT © 2016 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

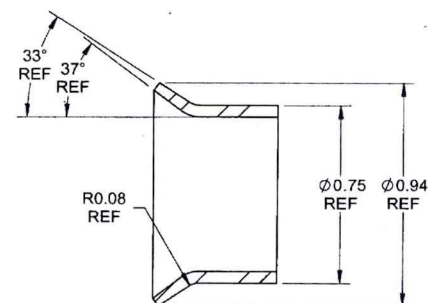
ITEM	QTY -043	P/N	DESCRIPTION
	X	D4961-043	TUBE ASSEMBLY
1	1	D4961-3	TUBE
2	2	AN818-L12J	NUT, TUBE COUPLING (DRILLED)
3	2	MS20819-12J	SLEEVE



D4961-043 TUBE ASSEMBLY



D4961-3 TUBE



SECTION B-B

NOTES:

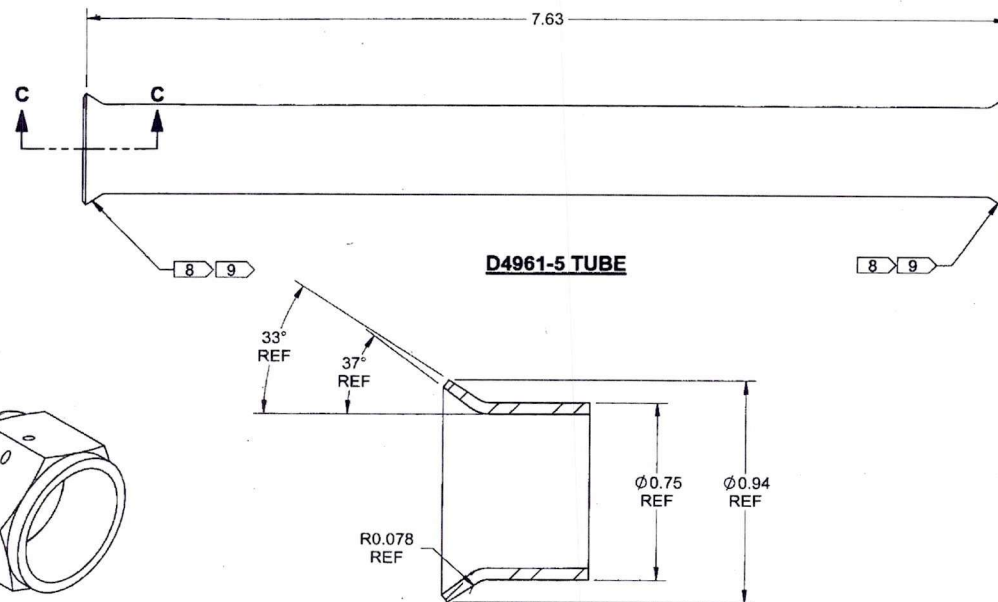
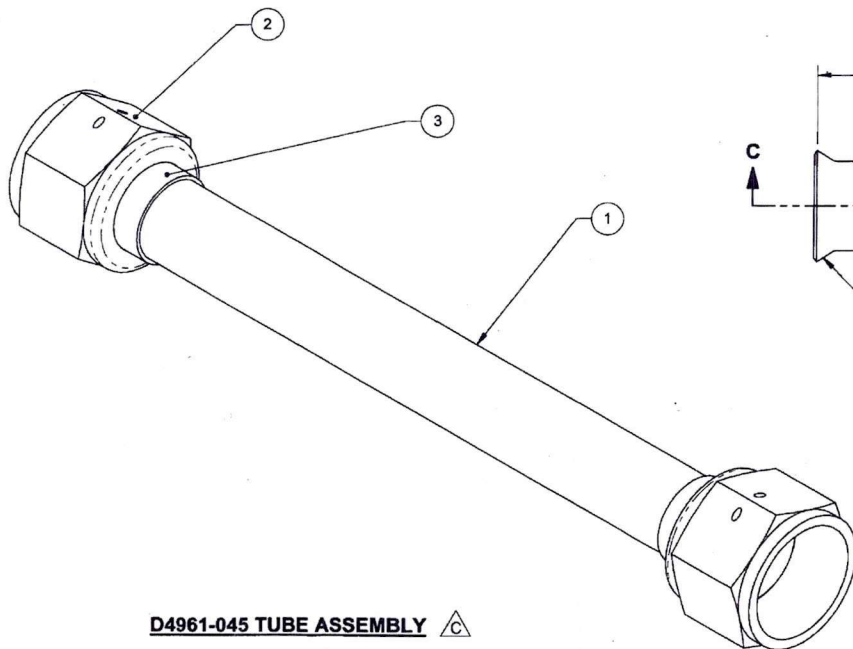
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SEAMLESS ROUND TUBING, $\phi 0.750 \times 0.049$ WALL PER ASTM A213 OR ASME SA213 OR ASTM A269 (REF DART SPEC M304TR)
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.44 lbs
- 8) FLARE TUBE PER MS33584
- 9) CLEAN INSIDE OF TUBE AFTER FLARING ENDS

RELEASED
2016-08-04

APPROVED

DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	CC		
CHECKED	VS	DRAWING NO.	REV. C
MFG. APPR.	DD	D4961	SHEET 2 OF 3
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	TUBE ASSEMBLY	NTS
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ITEM	QTY -045	P/N	DESCRIPTION
	X	D4961-045	TUBE ASSEMBLY
1	1	D4961-5	TUBE
2	2	AN818-L12J	NUT
3	2	MS20819-12J	SLEEVE



SECTION C-C

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SEAMLESS ROUND TUBING, $\phi 0.750 \times 0.049$ WALL PER ASTM A213 OR ASME SA213 OR ASTM A269 (REF DART SPEC M304TR)
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.59 lbs
- 8) FLARE TUBE PER MS33584
- 9) CLEAN INSIDE OF TUBE AFTER FLARING ENDS

RELEASED
2016-08-04

APPROVED

DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	CC		
CHECKED	VS	DRAWING NO.	REV. C
MFG. APPR.	DD	D4961	SHEET 3 OF 3
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	TUBE ASSEMBLY	NTS
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Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐ ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled		FAULT CATEGORY ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



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Container No: S150837



Part: D4961-041

Job No: 189916

Serial No/Batch: S150837

Revision:

Inspector:

Exp Date:

Instructions: Various STC's

Date: 02/05/19